Record Nr. UNINA9910300851303321 Digital Endocasts: From Skulls to Brains / / edited by Emiliano Bruner, **Titolo** Naomichi Ogihara, Hiroki C. Tanabe Pubbl/distr/stampa Tokyo:,: Springer Japan:,: Imprint: Springer,, 2018 **ISBN** 4-431-56582-5 Edizione [1st ed. 2018.] 1 online resource (X, 289 p. 143 illus., 106 illus. in color.) Descrizione fisica Collana Replacement of Neanderthals by Modern Humans Series, , 2365-063X Disciplina 301 Soggetti Anthropology Archaeology Human anatomy Neurology **Anatomy** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Part I Endocasts -- Endocasting skulls -- The brain and the braincase -- Digital reconstruction of fossil endocasts -- Paleneurology and primates -- Dinos and birds paleoneurology -- Inferring cortical subdivisions based on skull morphology -- Part II Computed Morphometrics -- Landmarking brains -- Digital restoration of fossil brain morphology -- Endocranial integration in hominoid primates --Endocasts and the evo-devo approach to study human brain evolution -- Endocast Network modeling -- Endocranial metabolism and vascular system -- Part III Brain and Evolution -- Frontal lobes evolution --Parietal lobes evolution -- Temporal lobes evolution -- Occipital lobes evolution -- Cerebellum evolution. Sommario/riassunto This book is dedicated to a specific component of paleoneurology, probably the most essential one: endocasts. A series of original papers collected here focuses on describing methods and techniques that are dedicated to reconstruct and study fossil endocasts through computed tools. The book is particularly oriented toward hominid paleoneurology, although it also includes chapters on different taxa to provide a more general view of current perspectives and problems in evolutionary

neuroanatomy. The first part of the book concerns techniques and

tools to cast endocranial anatomy. The second part deals with computed morphometrics, and the third part is devoted to comparative neurobiology. Those who want to approach the field in general terms will find this book especially helpful, as will those researchers working with endocranial anatomy and brain evolution. The book will also be useful for researchers and graduate students in anthropology, bioarchaeology, medicine, and related fields.